What is Claimed:

1. A method for measuring a cellular response comprising:
    i. stabilizing a mixture of cells comprising a plurality of cell types;
    ii. labeling two or more cell types from the mixture using cell type-specific reagent; and
    iii. assessing the content of cytoskeletal protein associated with the two or more cell types.

2. The method of claim 1 further comprising a step of:
    iv. comparing the content of the cytoskeletal protein associated with the two or more cell types with the content of cytoskeletal protein associated with corresponding cell types from a control.

3. The method of claim 1 further comprising a step of determining the size and granularity of the two or more cell types.

4. The method of claim 3 further comprising a step of comparing the content of the cytoskeletal protein associated with the two or more cell types, the cell size, and the cell granularity of the two or more cell types with a content of cytoskeletal protein, cell size, and cell granularity in corresponding cell types from a control.

5. The method of claim 1 wherein the two or more cell types comprise at least one of an immune cell.

6. The method of claim 1 wherein the two or more cell types comprise at least one of a lymphocyte, neutrophil, monocyte, eosinophil, erythrocyte, platelet, or basophil.

7. The method of claim 1 wherein the cytoskeletal protein is F-actin.

8. The method of claim 1 wherein the mixture of cells is collected using a non-chelating anticoagulant.

9. The method of claim 1 wherein the cells are stabilized at a temperature of from about 27 to about 50 degrees Celsius.

10. The method of claim 1 wherein the cells are stabilized at physiological temperature.

11. The method of claim 1 wherein assessing the content of the cytoskeletal protein is

performed using a flow cytometer.

12. The method of claim 1 further comprising the step of labeling cytoskeletal protein associated with the two or more cell types.

13. The method of claim 12 wherein assessing the content of the cytoskeletal protein is performed by microscopy.

14. The method of claim 1 wherein the cells are stabilized by fixation.

15. The method of claim 1 further comprising a step of providing a biologically active agent to the mixture of cells before stabilizing the cells.

16. The method of claim 15 wherein the biologically active agent is a stimulant or a depressant.

17. The method of claim 15 wherein the agent is a toxin.

18. The method of claim 15 wherein the agent is a bacterial or viral toxin.

19. The method of claim 15 wherein the agent is a drug or a small molecule.

20. The method of claim 19 wherein the agent is an enzyme regulator, immune modulator, or chemotherapeutic agent.

21. A method for measuring a cellular response comprising:
    i. assessing the content of cytoskeletal protein associated with a plurality of cell types; and
    ii. comparing the content of the cytoskeletal protein associated with said plurality of cell types to the content of corresponding cytoskeletal protein associated with corresponding cell types from a control.

22. The method of claim 21 further comprising a step of determining the size and granularity of the multiple cell types.

23. The method of claim 22 further comprising a step of comparing the content of the cytoskeletal protein associated with the plurality of cell types, the cell size, and the cell granularity of the plurality of cell types with a content of cytoskeletal protein, cell size, and cell granularity in corresponding cell types from a control.

24. The method of claim 21 wherein the plurality of cell types comprise immune cells.

25. The method of claim 21 wherein the plurality of cell types comprise at least one of a lymphocyte, neutrophil, monocyte, eosinophil, erythrocyte, platelet, or basophil.

26. The method of claim 21 wherein the cytoskeletal protein is F-actin.

27. The method of claim 21 wherein assessing the content of the cytoskeletal protein is performed using a flow cytometer.

28. The method of claim 21 further comprising a step of providing a biologically active agent to the plurality of cell types before assessing the content of cytoskeletal protein.

29. The method of claim 28 wherein the biologically active agent is a stimulant or a depressant.

30. The method of claim 28 wherein the agent is a toxin.

31. The method of claim 28 wherein the agent is a bacterial or viral toxin.

32. The method of claim 15 wherein the agent is a drug or a small molecule.

33. The method of claim 32 wherein the agent is an enzyme regulator, immune modulator, or chemotherapeutic agent.

34. A method for measuring a cellular response comprising:
    i. stabilizing a mixture of cells comprising a plurality of cell types; and
    ii. assessing the content of cytoskeletal protein associated with two or more cell types.

35. A method for measuring a cellular response comprising:
    i. stabilizing a mixture of cells comprising one cell type or a plurality of cell types at a temperature of from about 27 to about 50 degrees Celsius; and
    ii. assessing the content of cytoskeletal protein associated with the one or more cell types.

36. The method of claim 35 wherein the temperature is from about 30 to about 40 degrees Celsius.

37. A method for identifying a cytoskeletal signature comprising the step of:

i. assessing the content of cytoskeletal protein associated with a plurality of cell types.

38. The method of claim 37 further comprising the step of

ii. comparing the content of the cytoskeletal protein associated with said plurality of cell types to the content of corresponding cytoskeletal protein associated with corresponding cell types from a control.

39. The method of claim 37 further comprising a step of determining the size and granularity of the plurality of cell types.

40. The method of claim 39 further comprising a step of comparing the content of the cytoskeletal protein associated with the plurality of cell types, the cell size, and the cell granularity of the plurality of cell types with a content of cytoskeletal protein, cell size, and cell granularity in corresponding cell types from a control.

41. The method of claim 37 wherein the plurality of cell types comprise at least one of a lymphocyte, neutrophil, monocyte, eosinophil, erythrocyte, platelet, or basophil.

42. The method of claim 37 wherein the plurality of cell types comprise immune cells.

43. The method of claim 37 wherein the cytoskeletal protein is F-actin.

44. The method of claim 37 wherein assessing the content of the cytoskeletal protein is performed using a flow cytometer.

45. The method of claim 37 further comprising a step of providing a biologically active agent to the plurality of cell types before assessing the content of cytoskeletal protein.

46. The method of claim 45 wherein the biologically active agent is a stimulant or a depressant.

47. The method of claim 45 wherein the agent is a toxin.

48. The method of claim 45 wherein the agent is a bacterial or viral toxin.

49. The method of claim 15 wherein the agent is a drug or a small molecule.

50. The method of claim 49 wherein the agent is an enzyme regulator, immune modulator, or chemotherapeutic agent.

51. A method for assessing the presence or absence of a disease state in a subject comprising:
    i. assessing the content of cytoskeletal protein associated with a plurality of cell types from the subject;
    ii. correlating the content with the presence or absence of a disease state in the subject.

52. The method of claim 51 wherein said correlating step is performed by comparing the content of cytoskeletal protein associated with said plurality of cell types to the content of corresponding cytoskeletal protein associated with corresponding cell types from a control.

53. The method of claim 51 further comprising a step of determining the size and granularity of the plurality of cell types.

54. The method of claim 53 wherein said correlating step is performed by comparing the content of the cytoskeletal protein associated with the plurality of cell types, the cell size and the cell granularity of the plurality of cell types with a content of cytoskeletal protein, cell size, and cell granularity in corresponding cell types from a control.

55. The method of claim 51 wherein the plurality of cell types comprise at least one of a lymphocyte, neutrophil, monocyte, eosinophil, erythrocyte, platelet, or basophil.

56. The method of claim 51 wherein the plurality of cell types comprise immune cells.

57. The method of claim 51 wherein the cytoskeletal protein is F-actin.

58. The method of claim 51 wherein assessing the content of the cytoskeletal protein is performed using a flow cytometer.

59. The method of claim 51 wherein the disease state is bacterial infection.

60. The method of claim 51 wherein the disease state is viral infection.

61. The method of claim 51 wherein the disease state is cancer.

62. The method of claim 51 wherein the disease state is exposure to biological or chemical agent.

63. A method for measuring a clinical parameter in a subject comprising:

i. assessing the content of cytoskeletal protein associated with a plurality of cell types from each of a plurality of subjects belonging to a least two population groups differing with respect to at least one clinical parameter associated with a disease state;

ii. comparing the content of corresponding cytoskeletal protein associated with said plurality of cell types from said groups to each other to create cytoskeletal protein profiles that are associated with the clinical parameter.

64. A method for determining a response profile to a drug comprising

i. assessing the content of cytoskeletal protein associated with a plurality of cell types that have been exposed to the drug; and

ii. correlating the content of cytoskeletal protein with a probability of being a positive responder, negative responder, or non-responder to therapy with said drug.

65. The method of claim 64 wherein said correlating step is performed by comparing the content of cytoskeletal protein associated with said plurality of cell types to the content of corresponding cytoskeletal protein in corresponding cell types from a control.

66. The method of claim 64 further comprising a step of determining the size and granularity of the plurality of cell types.

67. The method of claim 66 wherein said correlating step is performed by comparing the content of the cytoskeletal protein associated with the plurality of cell types, the cell size and the cell granularity of the plurality of cell types with a content of cytoskeletal protein, cell size, and cell granularity in corresponding cell types from a control.

68. A method for monitoring the progression of a disease state in a subject comprising:

i. assessing the content of cytoskeletal protein associated with a plurality of cell types from the subject;

ii. correlating the content of cytoskeletal protein with progression of the disease state in the subject.

69. The method of claim 68 wherein said correlating step is performed by comparing the content of cytoskeletal protein associated with said plurality of cell types to the

content of corresponding cytoskeletal protein in corresponding cell types from a control.

70. The method of claim 68 further comprising a step of determining the size and granularity of the plurality of cell types.

71. The method of claim 70 wherein said correlating step is performed by comparing the content of the cytoskeletal protein associated with the plurality of cell types, the cell size and the cell granularity of the plurality of cell types with a content of cytoskeletal protein, cell size, and cell granularity in corresponding cell types from a control.

72. The method of claim 68 further comprising a step of providing a biologically active agent to the plurality of cell types before assessing the content of cytoskeletal protein.

73. A method for determining donor-recipient compatibility for transplant therapy comprising:
    i. assessing the content of cytoskeletal protein associated with a plurality of cell types from the recipient;
    ii. correlating the content of cytoskeletal protein with compatibility to the transplant.

74. The method of claim 73 further comprising a step of determining the size and granularity of the plurality of cell types.

75. A method of generating a classification system for classifying a cell sample:
    i. providing a learning set comprising a plurality of data objects, wherein each data object comprises data representing measurements of cytoskeletal protein in sample, and wherein the samples are classified according to at least two different clinical parameters; and
    ii. generating a classification model, wherein the classification model classifies a cell sample as indicative of a clinical parameter, indication, or condition.

76. A method for measuring the content of cytoskeletal protein comprising:
    i. stabilizing a mixture of cells comprising a plurality of cell types; and
    ii. assessing the content of cytoskeletal protein associated with two or more of the cell types.

77. A method for preserving a cell comprising stabilizing a mixture of cells comprising

one cell type or a plurality of cell types at a temperature of from about 27 to about 50 degrees Celsius.

78. The method of claim 77, wherein the temperature is from about 30 to about 40 degrees Celsius.